10/593544 IAP9'Rec'd PCT/PTO 20 SEP 2006 CLAIMS

[Claim 1]

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A method of manufacturing an eye lens material having a process in which a phosphorylcholine group-containing chemical compound represented by the following formula (1) is reacted and covalently bonded onto the surface of an eye lens material wherein the chemical compound represented by the following formula (2) is reacted and covalently bonded through acetal bonding to the eye lens material having OH groups in water, an organic solvent, or a water/organic solvent mixture.

[Chemical formula 1]

$$\begin{array}{c} O \\ O \\ O \\ O \end{array}$$

[Chemical formula 2]

20 (2) n denotes a natural number 1-18.

[Claim 2]

The method of manufacturing an eye lens material of claim 1 wherein constituent monomers of said eye lens material include monomers containing a hydroxyl group.

5 [Claim 3]

The method of manufacturing an eye lens material of claim 1 wherein constituent monomers of said eye lens material include 2-hydroxyethylmethacrylate.

[Claim 4]

The method of manufacturing an eye lens material of claim 1 wherein constituent monomers of said eye lens material include polyvinyl alcohol.

[Claim 5]

A method of manufacturing an eye lens material

having a process in which a phosphorylcholine groupcontaining chemical compound represented by the
following formula (1) is reacted and covalently bonded
onto the surface of an eye lens material wherein OH
groups are introduced to the surface of the eye lens

material by means of a plasma treatment and then the
chemical compound represented by the following formula
(2) is reacted and covalently bonded through acetal
bonding in water, an organic solvent, or a water/organic
solvent mixture.

25 [Chemical formula 3]

$$\begin{array}{c} O \\ O \\ O \\ O \end{array}$$

[Chemical formula 4]

(2) n denotes a natural number 1-18.

[Claim 6]

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An eye lens material characteristically obtained with a method of manufacturing an eye lens material having a process in which a phosphorylcholine groupcontaining chemical compound represented by the following formula (1) is reacted and covalently bonded onto the surface of an eye lens material wherein the chemical compound represented by the following formula (2) is reacted and covalently bonded through acetal bonding to the eye lens material having OH groups in water, an organic solvent, or a water/organic solvent mixture.

[Chemical formula 5]

$$\begin{array}{c} O \\ O \\ O \\ O \end{array}$$

[Chemical formula 6]

(2) n denotes a natural number 1-18.

[Claim 7]

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An eye lens material characteristically obtained with a method of manufacturing an eye lens material having a process in which a phosphorylcholine groupcontaining chemical compound represented by the following formula (1) is reacted and covalently bonded onto the surface of an eye lens material wherein OH groups are introduced to the surface of the eye lens material by means of a plasma treatment and then the chemical compound represented by the following formula (2) is reacted and covalently bonded through acetal bonding in water, an organic solvent, or a water/organic solvent mixture.

20 [Chemical formula 7]

$$\begin{array}{c} O \\ O \\ O \\ O \end{array}$$

[Chemical formula 8]

(2) n denotes a natural number 1-18.

[Claim 8]

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A protein adsorption prevention method wherein protein adsorption on the eye lens material is prevented by means of an after-treatment in which the chemical compound represented by the following formula (2) is reacted and covalently bonded through acetal bonding to the eye lens material having OH groups in water, an organic solvent, or a water/organic solvent mixture.

15 [Chemical formula 9]

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(2) n denotes a natural number 1-18.